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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/914,947      | 12/31/2001  | David John Edwards   | 053694-0112         | 6623             |

7590 02/12/2003  
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Suite 500  
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Washington, DC 20007-5109

EXAMINER

GLENN, KIMBERLY E

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2817

DATE MAILED: 02/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/914,947

Applicant(s)

EDWARDS ET AL.

Examiner

Kimberly E Glenn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 7 and 10-12 is/are rejected.
- 7) ☒ Claim(s) 5, 8 and 9 is/are objected to.
- 8) ☒ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                            | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>7, 9</u> . | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the additional pairs of inputs must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### ***Claim Objections***

Claim 11 objected to because of the following informalities: Claim 11 discloses that the device can be operated as a splitter. Claim 1, which claim 11 is dependent, discloses using the device as a combiner. The combiner concept must be consistent through out all the dependent claims. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6, 7, 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Baril  
US Pat. 4,956,614

Baril discloses a wave device for supporting electromagnetic waves, the device including: a first pair of inputs (A and B) for setting up a first standing wave there between; a second pair of inputs (D and C) for setting up a second standing wave there between and positioned such that

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the input signal of each of the first and second pairs of inputs is unaffected by the state or impedance of the other of the first and second pairs of inputs; and an output 65 positioned so as to receive power from both the first and second standing waves. A conductive plate (vanes) supports the first and second standing waves. The plate (vanes) is mounted parallel to a grounded structure and is separated from the grounded structure by a dielectric (air). The device is constructed as a microstrip structure or a stripline structure. The plate is circular and each respective pair of inputs is connected to the plate across a diameter of the plate. The output is positioned at substantially the anti-node of the device. The device further comprising one or more additional pairs of inputs for setting up additional respective standing waves. The method step to the above-disclosed apparatus is inherent. (See figure 3 and marked figure 3 and column 2 line 52 through column 4 line 51)

***Allowable Subject Matter***

Claims 5, 8 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: With regards to claim 5, the prior art of record does not disclose or fairly teach the plate having a polygon shape and having a even number of sides and each respective pair of inputs are connected across an pair of opposing sides. With regards to claim 8, the prior art of record does not disclose or fairly teach the distance between a pair of inputs equaling an integer of the wavelength of the wave transmitted by the inputs. With regards to claim 9, the prior art of record

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does not disclose or fairly teach power dividers for providing the pairs of inputs from the signal sources.

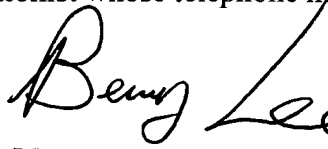
*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. De Ronde US Pat. 4,525,690 and Salzberg US Pat. 3,619,787.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly E Glenn whose telephone number is (703) 306-5942. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (703) 308-4909. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

  
BENNY T. LEE  
PRIMARY EXAMINER  
ART UNIT 2817

Kimberly E Glenn  
Examiner  
Art Unit 2817

keg  
February 7, 2003